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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,173	09/08/2003	Shunsuke Hijikata	61355-046	9940

EXAMINER	
TO, TUAN C	

ART UNIT	PAPER NUMBER
3663	

MAIL DATE	DELIVERY MODE
10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/656,173	HIJIKATA, SHUNSUKE	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tuan C. To	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-12, 14, 15, 19, 21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 14, 15, 19 and 21 is/are rejected.
- 7) ☒ Claim(s) 3-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

It is noted that the newly submitted claim 23 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 2-12, 14, 15, 19, and 21 are drawn to an apparatus. Claim 23 is drawn to a process.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 23 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The indicated allowability of claims 2, and 14 is withdrawn in view of the newly discovered reference(s) to Kato et al. (US 6059068A). Rejections based on the newly cited reference(s) follow.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14 and 15 are rejected under 35 U.S.C. 112 (second paragraph) as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 14, the claim recites the limitation "the vehicle operating device" in the claim. There is insufficient antecedent basis for this limitation in the claim. The dependent claim 15 is thus rejected as well.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. (US 20020045981A1) and in view of Kato et al. (US 6059068A) (previously cited by the examiner).

Regarding claims 2, 19, and 21, The U.S patent application Publication to Ichikawa et al. has been provided as teaching a driving assist system for a vehicle comprising CCD camera (41R, 41L) as a traveling condition recognition device that detect a state of a road (paragraph 0043) and traveling environment of the vehicle (paragraph 0043, four categories are presented such as snowy, unpaved, wet and paved, dry and paved), the system of Ichikawa et al. further includes a calculation unit (45) that calculates magnitude of the overall luminance and therefore recognizes the whole surface of the road. The unit (45) classifies the situation of a road on which the vehicle is driven forward (paragraph 0043).

Ichikawa et al. is missing to include a reaction force adjustment device, an external influence detection device, and a reaction force correction device as now claimed.

Kato et al. teaches a steering apparatus for a vehicle comprising: a reaction force adjustment device (7) configured to adjust reaction force of a steering device (increasing or decreasing) based upon the level of vehicle speed calculated by the steering control unit (4); an external influence detection device configured to detect an external influence which will affect an operation of the steering device (figure 3, vehicle speed sensor 6 detect external influence with affect the operation of the steering device 2); a reaction force correction device configured to correct the reaction force characteristics of the steering device based upon detection results obtained by the vehicle speed sensor (6) (column 2, lines 39-46).

Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system as taught by Ichikawa et al. to include the teaching of Kato et al. in order to smoothly control the running of the vehicle on different surface of a road.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. (US 20020045981A1), Kato et al. (US 6059068A), and further in view of Minowa et al. (US 5902345A).

As discussed herein above, the reference to Ichikawa et al. has been provided as teaching a driving assist system for a vehicle comprising CCD camera (41R, 41L) as a traveling condition recognition device that detect a state of a road (paragraph 0043) and

traveling environment of the vehicle (paragraph 0043, four categories are presented such as snowy, unpaved, wet and paved, dry and paved), the system of Ichikawa et al. further includes a calculation unit (45) that calculates magnitude of the overall luminance and therefore recognizes the whole surface of the road. The unit (45) classifies the situation of a road on which the vehicle is driven forward (paragraph 0043).

Kato et al. teaches a steering apparatus for a vehicle comprising: a reaction force adjustment device (7) configured to adjust reaction force of a steering device (increasing or decreasing) based upon the level of vehicle speed calculated by the steering control unit (4); an external influence detection device configured to detect an external influence which will affect an operation of the steering device (figure 3, vehicle speed sensor 6 detect external influence with affect the operation of the steering device 2); a reaction force correction device configured to correct the reaction force characteristics of the steering device based upon detection results obtained by the vehicle speed sensor (6) (column 2, lines 39-46).

Neither Ichikawa et al. nor Kato et al. teaches the external influence device detects a state of depression of the accelerator pedal to judge the driver's perception, wherein the external influence detection device judges the driver's perception to be acute if an extent to which the accelerator pedal is depressed is being increased and judges the driver's perception to be dull if the extent of depression is being decreased.

The reference to Minowa et al. has been provided as teaching a system/method for controller power train of a motor vehicle including an acceleration/detection detector

unit detects an accelerator by detecting a positive accelerator pedal depression by a driver, and detects deceleration by detecting a negative acceleration depression by the driver (column 1, lines 58-66).

Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system as taught by Ichikawa et al., Kato et al. to include the teaching of Minowa et al. in order to effectively control the engine revolution speed by reducing the amounts of fuel and air supplied.

#### ***Allowable Subject Matter***

The examiner has found none of the prior art of record discloses or fairly suggests the limitations of claim 3 and 4 of the present application. Therefore, claims 3-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusions***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

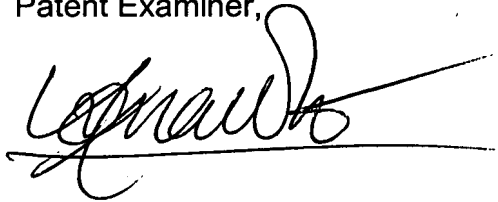
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner,

A handwritten signature in black ink, appearing to read 'Tuan C To', is written over a horizontal line.

Tuan C To

October 24, 2007